

CHAPTER 5 SPECIAL INSPECTIONS AND TESTING SERVICES

SIFC-501.0 PROCEDURAL REQUIREMENTS

501.1 General: The **Owner** shall be responsible for retaining an independent *Special Inspections Engineer of Record (SIER)* to provide special inspections and testing services, including *Inspection and Testing Agency* supervision. Under no circumstances shall the **General Contractor (GC)** or any of the subcontractors be permitted to provide special inspections and testing services. The **GC** shall coordinate the scheduling of inspections. The *Inspection and Testing Agency* personnel required on-site shall be in numbers sufficient to perform all required tasks.

501.2 Review and Approval: As part of the *Statement of Special Inspections* submitted for County approval and permit issuance, the **Owner** shall furnish the County with the names of the **SIER** and the *Inspection and Testing Agency* retained to provide special inspections and testing services. The SSI is reviewed and approved by the Building Plan Review Branch and **FCCSS** (see Sections SIFC-304.2 and 404.4).

After County review and approval of the SSI, the **SIER** shall submit to the **FCCSS** one copy of résumés of all *Inspection and Testing Agency* personnel assigned to the project, inspectors' certifications and accreditation certificates for laboratory facilities. The personnel and laboratories are subject to **FCCSS** approval.

501.3 Changes in Construction Team: In the event that the **AR**, the **SER**, the **GER**, the **GC**, the **SIER**, or the organizations or individuals contracted for special inspections or testing services are changed during the course of the work, the **Owner** shall notify the **FCCSS** immediately. The **Owner** shall provide a written explanation for such change; shall identify and obtain approval for the replacement organization or a replacement individual; and shall schedule a new meeting with **FCCSS** and the replacement organization or a replacement individual. The **Owner** shall ensure that there is a timely transfer of information and responsibility to the replacement party.

SIFC-502.0 ROLES AND RESPONSIBILITIES

502.1 Special Inspections: The **SIER** shall provide and *certify* special inspections of building components and testing of construction materials where such inspections and testing are required by the VUSBC, the *Statement of Special Inspections* and this Special Inspections Document.

502.2 Approved Documents: Prior to conducting special inspections and materials testing, the **SIER** shall be responsible for verification of the following:

- a. **Building Permit:** A building permit for the particular construction has been issued

and a copy of the building permit is available at the job site.

- b. **Approved Construction Documents:** A set of original *County-approved construction documents* is available at the job site.
- c. **Approved Fabrication and Erection Documents:** *County-approved fabrication and erection documents*, which also bear the **Structural Engineer of Record (SER)** review/approval stamp, are available at the job site. Other approved *fabrication and erection documents* which do not require County approval but which bear the **SER** review/approval stamp are available at the job site and a record copy of such documents received by **FCCSS** where required by this Special Inspections Document.
- d. **Document Revisions:** All revisions to *County-approved construction documents* or other *fabrication and erection documents* have been approved, signed and sealed by the **Architect of Record (AR)**, **SER** and/or **Geotechnical Engineer of Record (GER)**, as appropriate. If such revisions do not bear the County stamp of approval, the **SIER** shall confirm with the **FCCSS** that such revisions were authorized by County staff. It shall be the **AR's**, **SER's**, and/or **GER's** responsibility to submit written revisions to **FCCSS** confirming orally approved field changes within seven working days of approval.

502.3 Deviations: The **SIER** and the **SIER's** representatives/field technicians shall not suggest, direct or authorize the fabricator, erector or contractor to deviate from the contract documents, *County-approved construction documents*, or *County-approved fabrication and erection documents*, without the express written approval of the **AR**, **SER**, **GER**, or **FCCSS**, as appropriate.

502.4 Special Inspection Reports: The **SIER** shall report the results of testing and inspections, both approvals and rejections, to the **FCCSS** according to the following procedures:

- a. **Seal and Signature:** Each report shall bear a signature and seal of the **SIER** and shall include the correct building permit number and project's address. Reports without project identification shall be rejected.
- b. **Submissions:** Both approval and rejection reports shall be submitted to all parties, i.e., **FCCSS**, the **Owner**, the **GC** and the **AR**, **SER**, and/or **GER**. Deficiencies shall be reported to the **GC** superintendent for correction. With the exception of situations where a code violation or safety hazard is discovered (see Sections SIFC-502.5 and 502.6), all inspection and test reports shall be submitted to **FCCSS** within seven working days of the inspection or test performed.
- c. **Compliance:** Unless deficiencies are discovered or code violations are revealed during the conduct of special inspection and testing services, these reports shall indicate that the specified work has been inspected and found to be in compliance with *County-approved documents*.

- d. **Deficiencies:** Deficiency reports shall contain the details describing the nature and specific location of the deficiency and include a description of the action recommended by the **AR, SER** and/or **GER**, as appropriate, to correct it.
- e. **Correction of Deficiencies:** At the completion of a project, all recorded problems or deficiencies shall be documented as having been corrected and approved by the **AR, SER** and/or **GER**, as appropriate.
- f. **Completion Letters:** Upon completion of special inspections and testing for a particular construction, such as "structural steel", the **SIER** shall, after review and approval by the appropriate **Registered Design Professionals**, submit a *Completion Letter* to **FCCSS**.
- g. **Final Report of Special Inspections:** Upon completion of all special inspections and testing for the scope of special inspections applicable to the construction project, the **SIER** shall, after review and approval by the appropriate **Registered Design Professionals**, submit a *Final Report of Special Inspections* to **FCCSS**.

502.5 Code Violations: When the **SIER** and/or **SIER** personnel discover a condition during the conduct of special inspection and/or testing services that constitutes a violation of the VUSBC or the Code of the County of Fairfax, the **SIER** shall immediately notify the appropriate **Registered Design Professionals** of record and **FCCSS** for resolution, followed with a written report submitted to **FCCSS** within seven working days.

502.6 Job Site Safety Violations: When the **SIER** and/or **SIER** personnel discover a condition that poses an immediate or serious safety hazard to job site workers and/or the general public, the **SIER** shall immediately notify the **GC** superintendent and **FCCSS** for resolution.

SIFC-503.0 PERSONNEL QUALIFICATIONS

503.1 Direct Supervision: The *Inspection and Testing Agency* personnel assigned to conduct special inspections in Fairfax County shall work under the supervision of a **Registered Design Professional**.

503.2 Certification: Except for individuals who are **Registered Design Professionals**, field personnel shall be certified by examination through ACI, AWS, ASNT, NICET, WACEL, or other organizations whose programs are recognized by the County. The personnel of the *Inspection and Testing Agency* shall perform only those services in which they have demonstrated competency through such a recognized certification or registration program.

503.3 Unusual Functions: In the event there is no certification program applicable to a specific function, the **SIER** shall submit a signed statement attesting to the competency of personnel and identifying the basis upon which such statement is made.

SIFC-504.0 LABORATORY ACCEPTANCE STANDARDS

Laboratory facilities must be accredited by an agency such as A2LA, NIST, NVLAP, WACEL or other organizations whose programs are recognized by the County. All laboratory facilities must meet the requirements of ASTM E329, ASTM D3740, and ASTM C1077 as applicable. On-site laboratory facilities shall be *certified* by the **SIER**.